

MANAGING DROUGHT

IN THE SOUTHERN PLAINS

September 29, 2011

For audio, call 866-658-9195
Passcode: 6857506#

Webinar Format

- 2nd and 4th Thursdays of each month at 11:00 a.m. Central Time
- Overview of regional drought conditions and outlook for next several weeks to months
 - led by the Drought Monitor authors
- Closer look at the impacts in a state
 - State Climatologists, rotating basis
- Discussion Topic
 - Alternating between an impact type (wildfire, agriculture) and a resource (monitoring tools, assistance programs)
- Open-ended time for questions and comments
- Total Time Commitment: 20 minutes for presentations, as much time as needed for discussion
- Past webinars, summaries, and Federal/State Assistance links posted on http://www.drought.gov/portal/server.pt/community/south_central

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Webinar Topics

- Sectors & Impacts
 - Agricultural Impacts
 - Cattle and Livestock
 - Ecological Impacts
 - Water Supply
 - Wildfire
 - Winter Wheat
- Resources & Monitoring
 - Assistance Programs & Tax Deferrals
 - Drought Ready Communities
 - La Nina
 - Ranch Drought Planning
 - Reporting on Drought Impacts
 - U.S. Drought Monitor
 - Vegetation Health Monitoring

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Webinar Series Goals

- To improve communication among agencies and organizations in the Southern Plains who are being affected by the historic and exceptional drought
- To provide information on available resources and assistance to help monitor and manage drought
- To understand the impacts of drought in this region from the perspective of those who are tasked with managing it
- To document impacts that will help improve the weekly U.S. Drought Monitor assessment and our understanding of how drought impacts evolve and decay

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Regional Drought Monitor Update

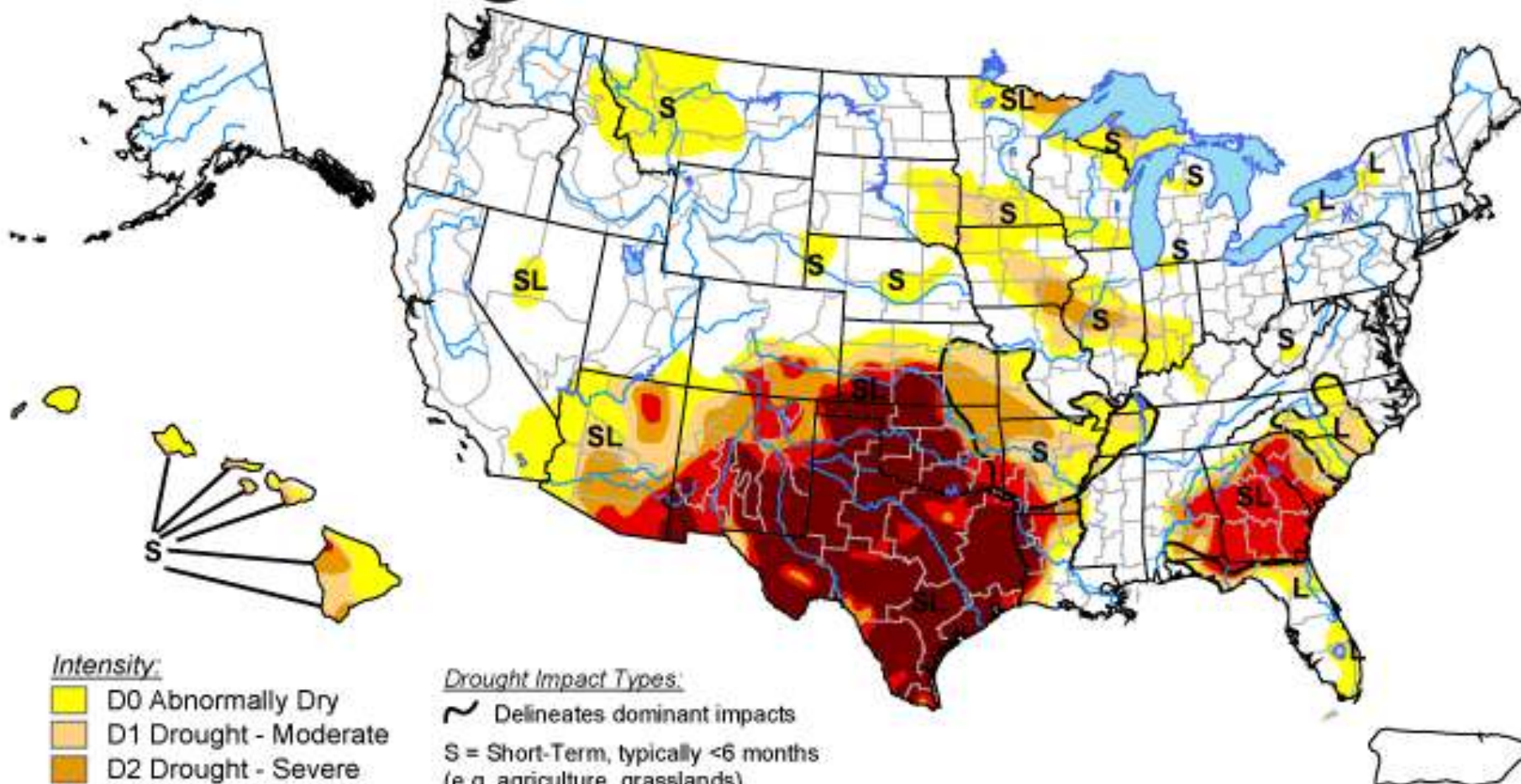
**Mark Svoboda, Climatologist
Monitoring Program Area Leader**

**National Drought Mitigation Center
School of Natural Resources
University of Nebraska-Lincoln**

U.S. Drought Monitor

September 27, 2011

Valid 8 a.m. EDT



Intensity:

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

Drought Impact Types:

- Delineates dominant impacts
- S = Short-Term, typically <6 months
(e.g. agriculture, grasslands)
- L = Long-Term, typically >6 months
(e.g. hydrology, ecology)

The Drought Monitor focuses on broad-scale conditions.
Local conditions may vary. See accompanying text summary
for forecast statements.



Released Thursday, September 29, 2011

Author: Michael Brewer/Liz Love-Brotak, NOAA/NESDIS/NCDC

<http://droughtmonitor.unl.edu/>

U.S. Drought Monitor

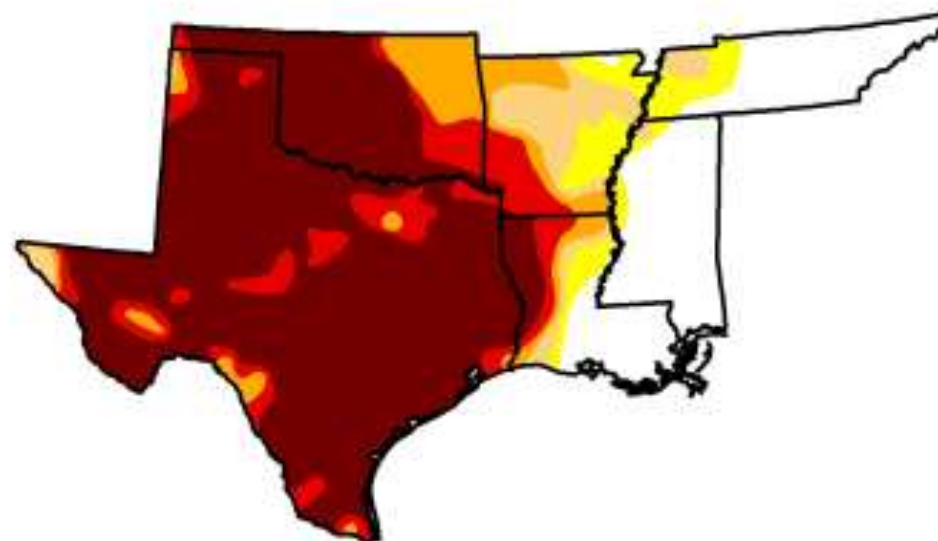
South

September 27, 2011

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	18.34	81.66	76.26	70.61	63.67	53.77
Last Week (09/20/2011 map)	18.41	81.59	76.35	69.79	64.54	53.61
3 Months Ago (06/28/2011 map)	25.52	74.48	59.82	53.42	47.27	47.27
Start of Calendar Year (12/28/2010 map)	8.86	91.14	67.65	35.21	10.17	0.00
Start of Water Year (09/28/2010 map)	54.23	45.77	20.04	6.79	0.83	0.00
One Year Ago (09/21/2010 map)	58.00	42.00	12.70	5.13	0.83	0.00



Intensity:



The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

<http://drought.unl.edu/dm>



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Michael Brewer, National Climatic Data Center, NOAA

U.S. Drought Monitor

West

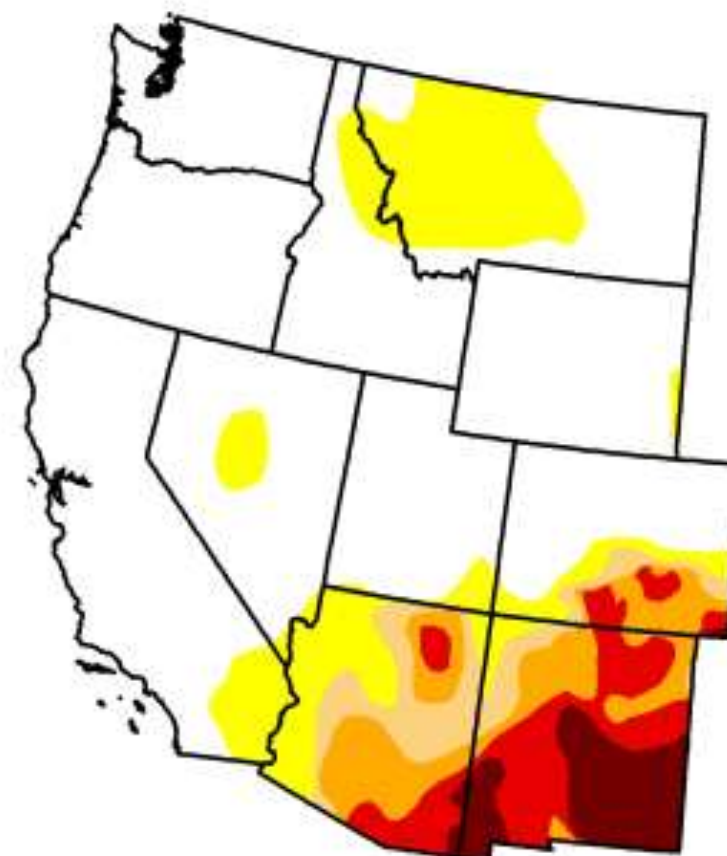
September 27, 2011

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	66.72	33.28	19.04	14.99	9.30	3.81
Last Week (09/20/2011 map)	73.65	26.35	19.04	14.99	9.30	3.81
3 Months Ago (06/28/2011 map)	73.59	26.41	19.31	16.01	11.35	5.65
Start of Calendar Year (12/28/2010 map)	73.26	26.74	11.98	0.89	0.00	0.00
Start of Water Year (09/28/2010 map)	62.50	37.50	8.14	0.56	0.00	0.00
One Year Ago (09/21/2010 map)	69.90	30.10	6.92	0.56	0.00	0.00

Intensity:

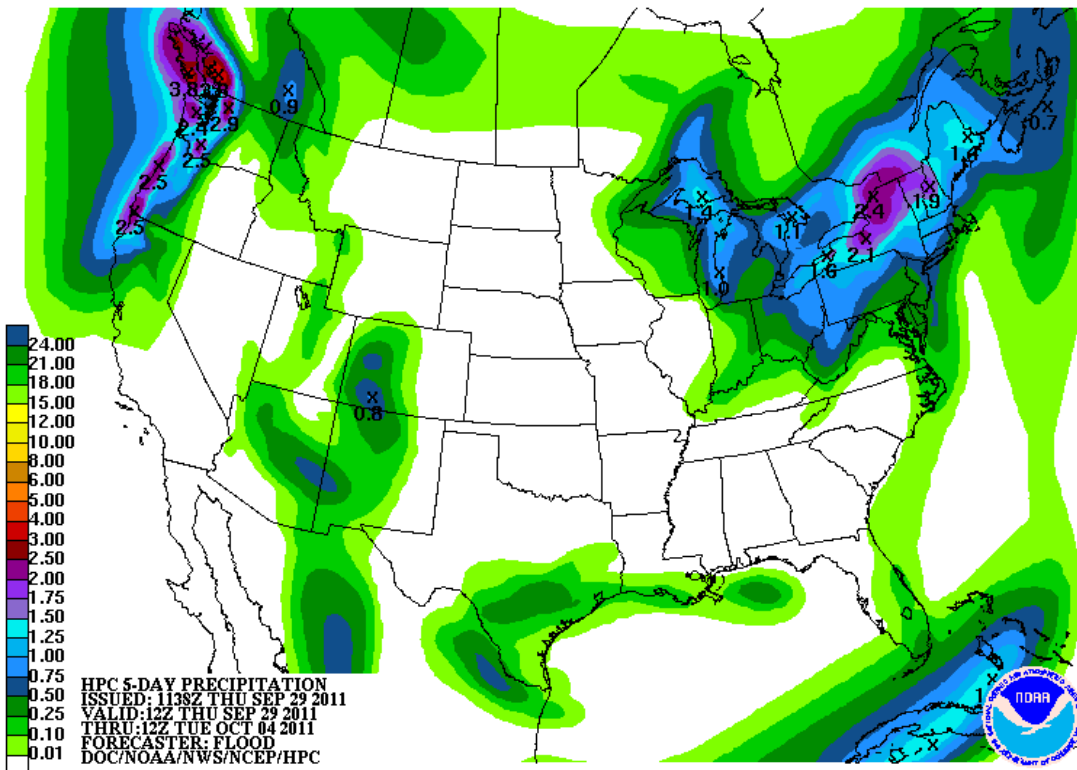


The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

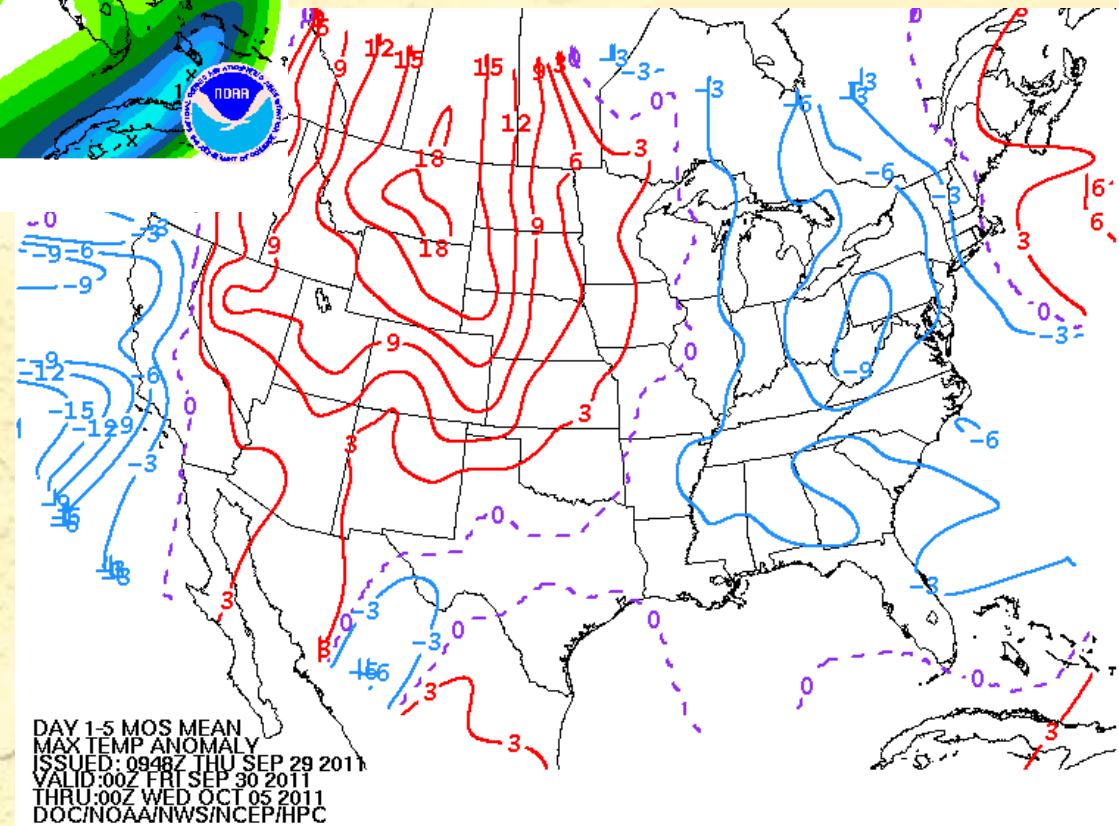
<http://drought.unl.edu/dm>



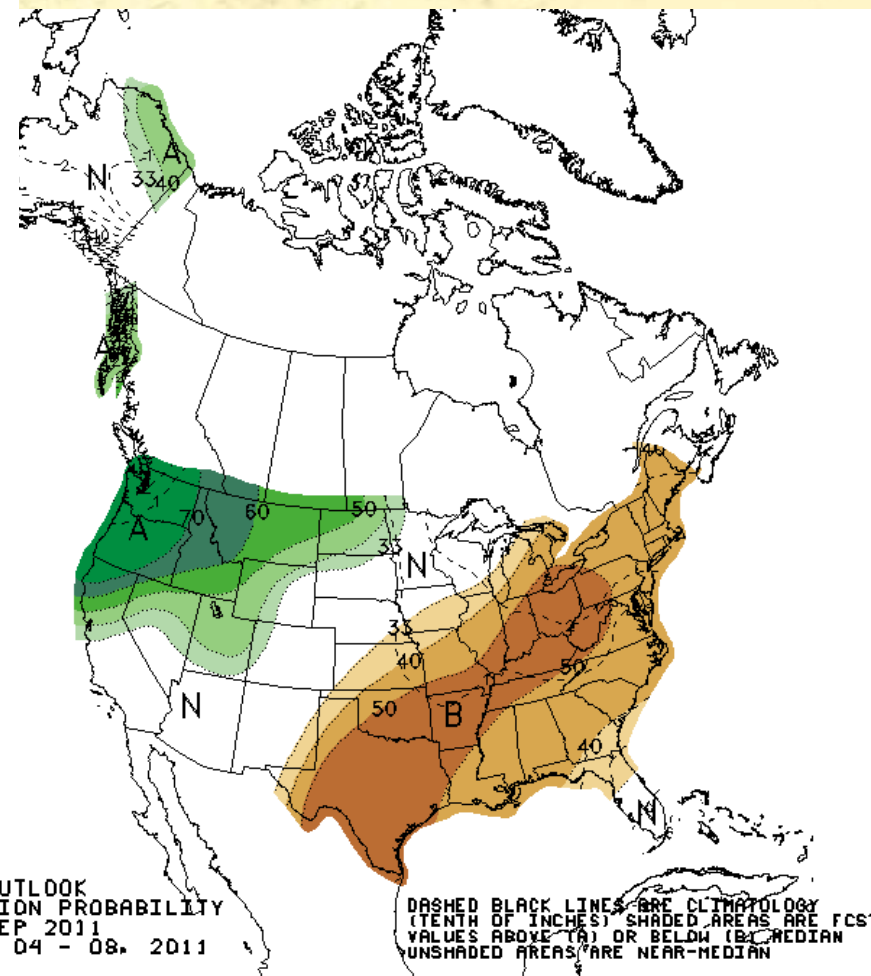
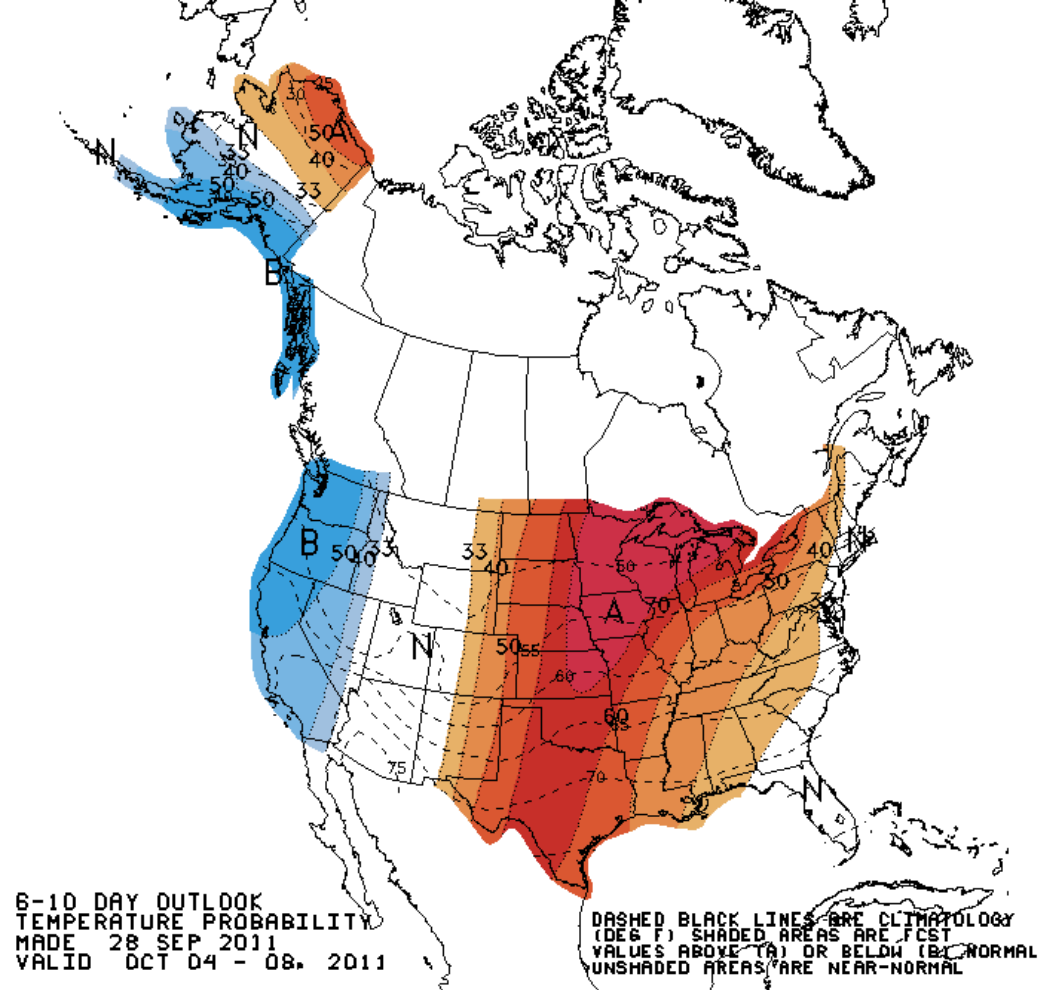
Released Thursday, September 29, 2011
Michael Brewer, National Climatic Data Center, NOAA



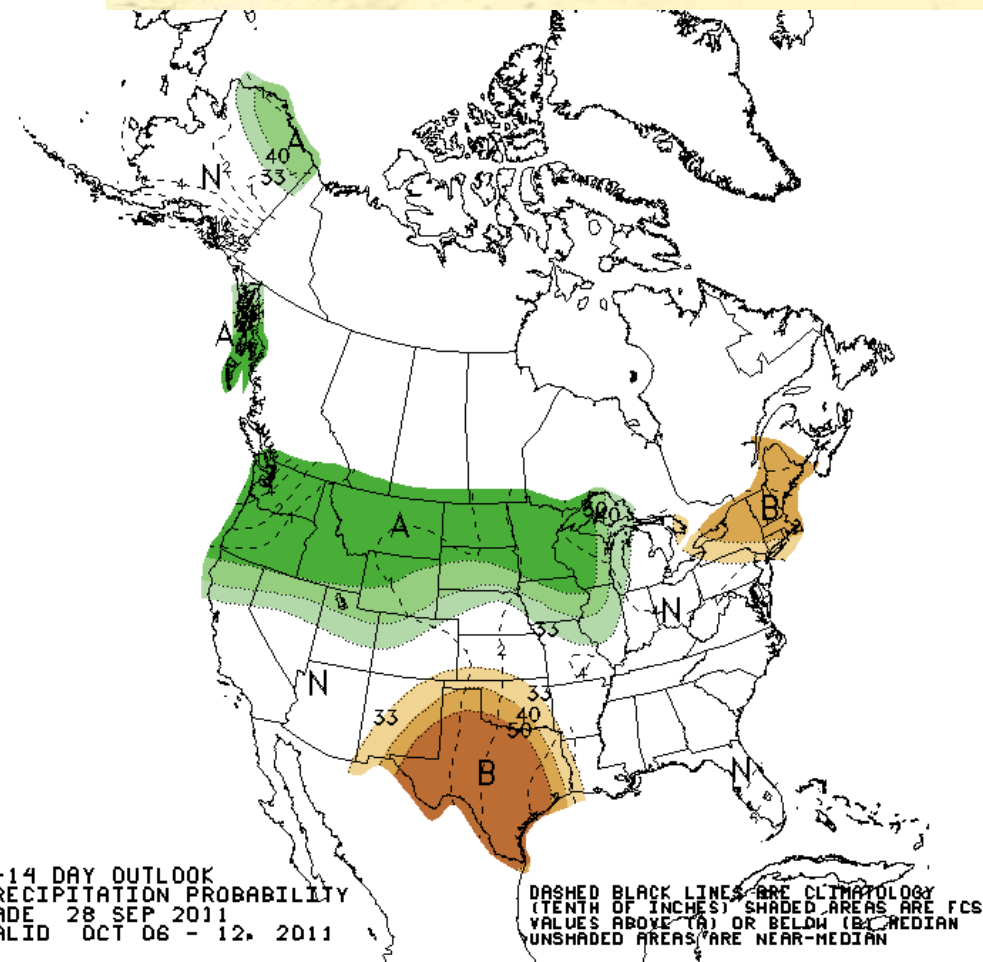
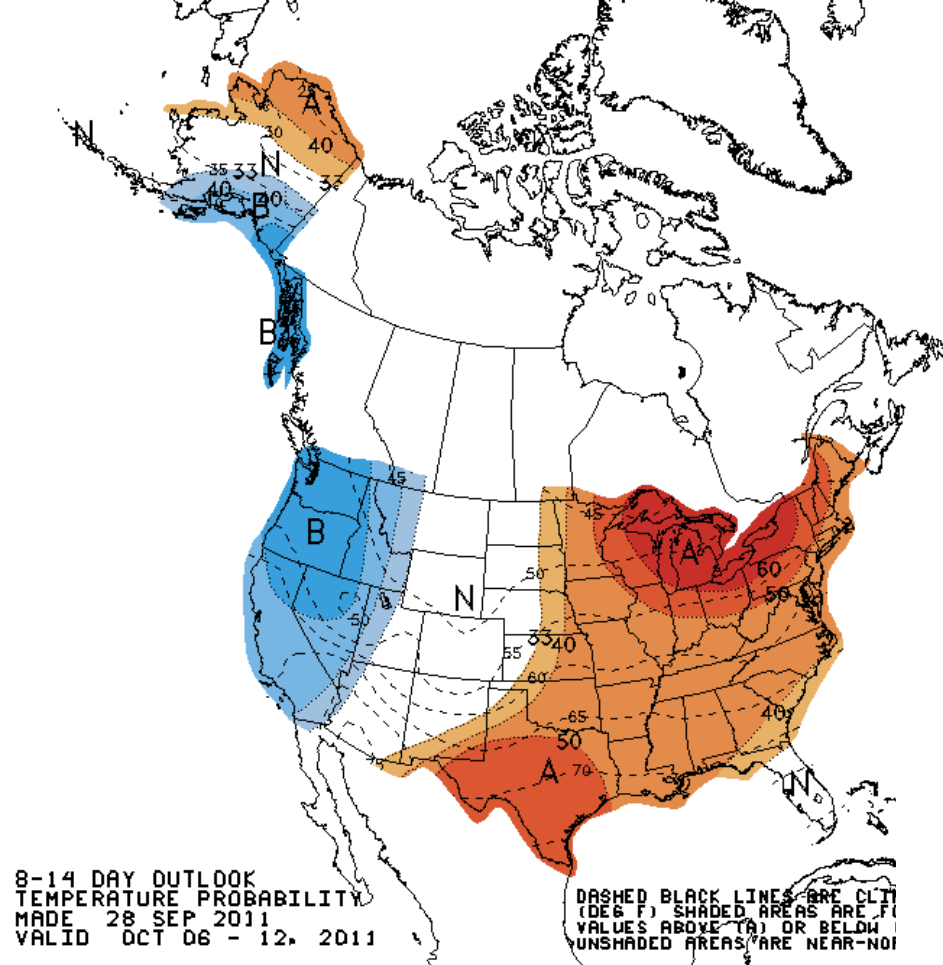
HPC 5-Day Outlook

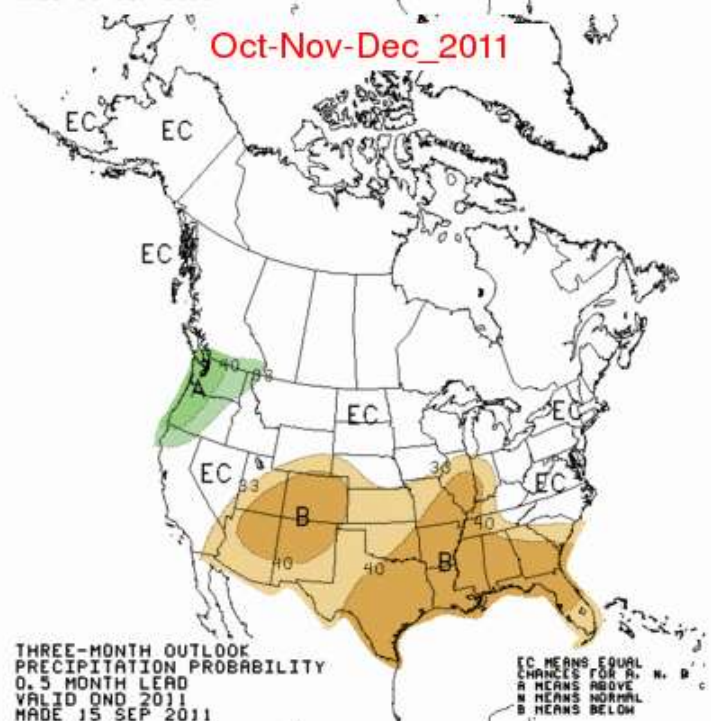
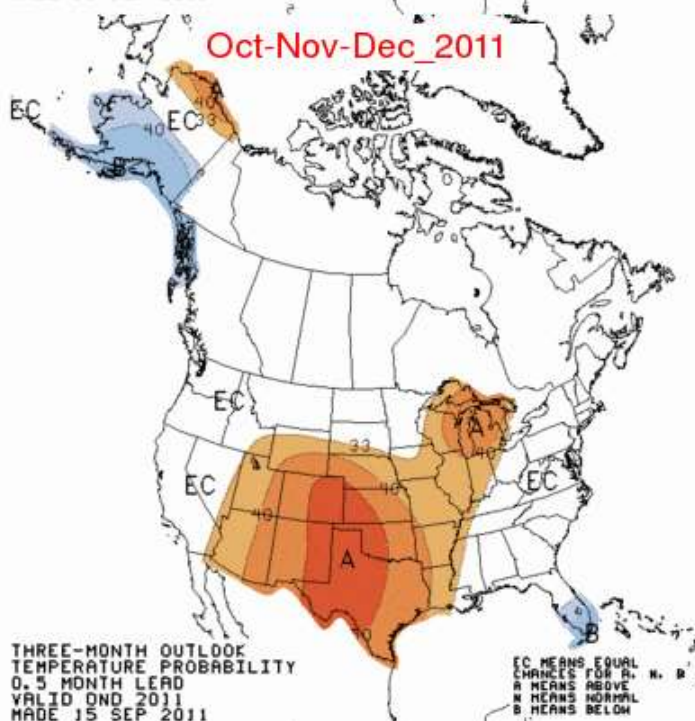
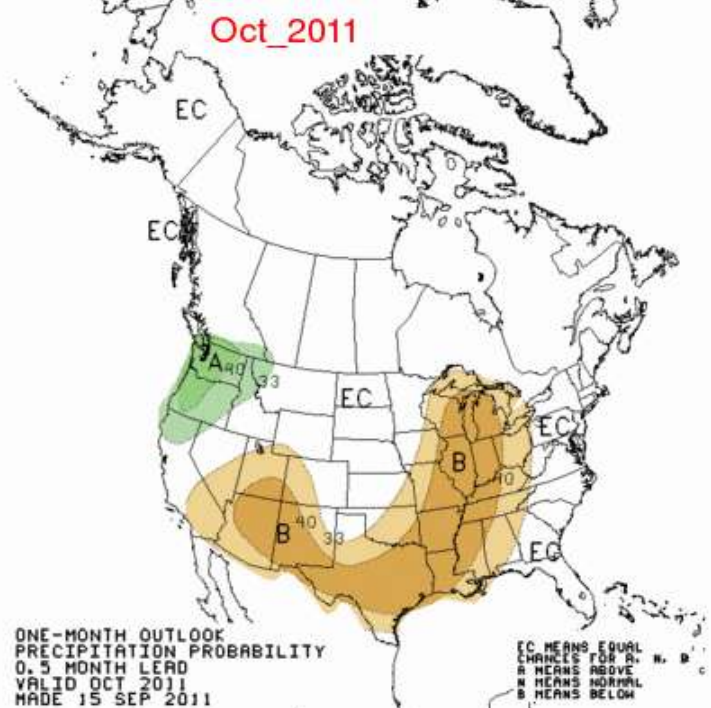
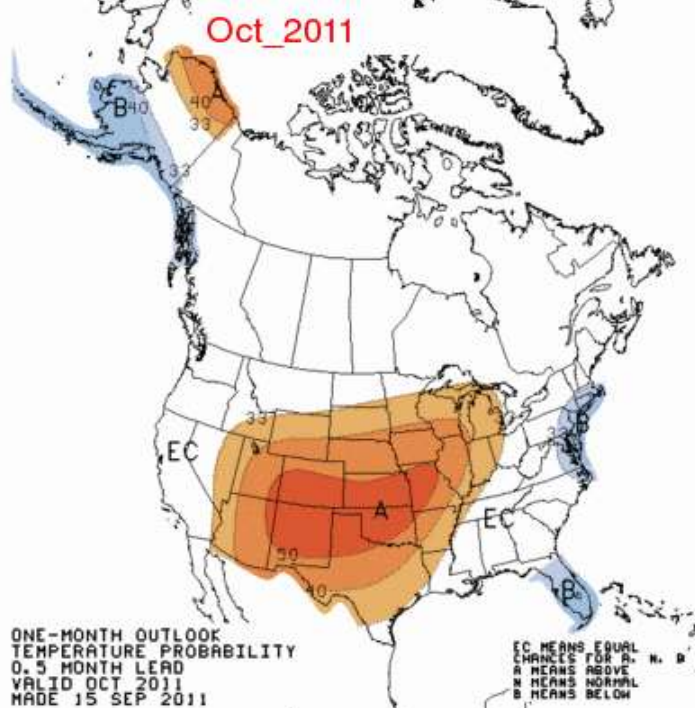


CPC 6-10-Day Outlooks



CPC 8-14-Day Outlooks





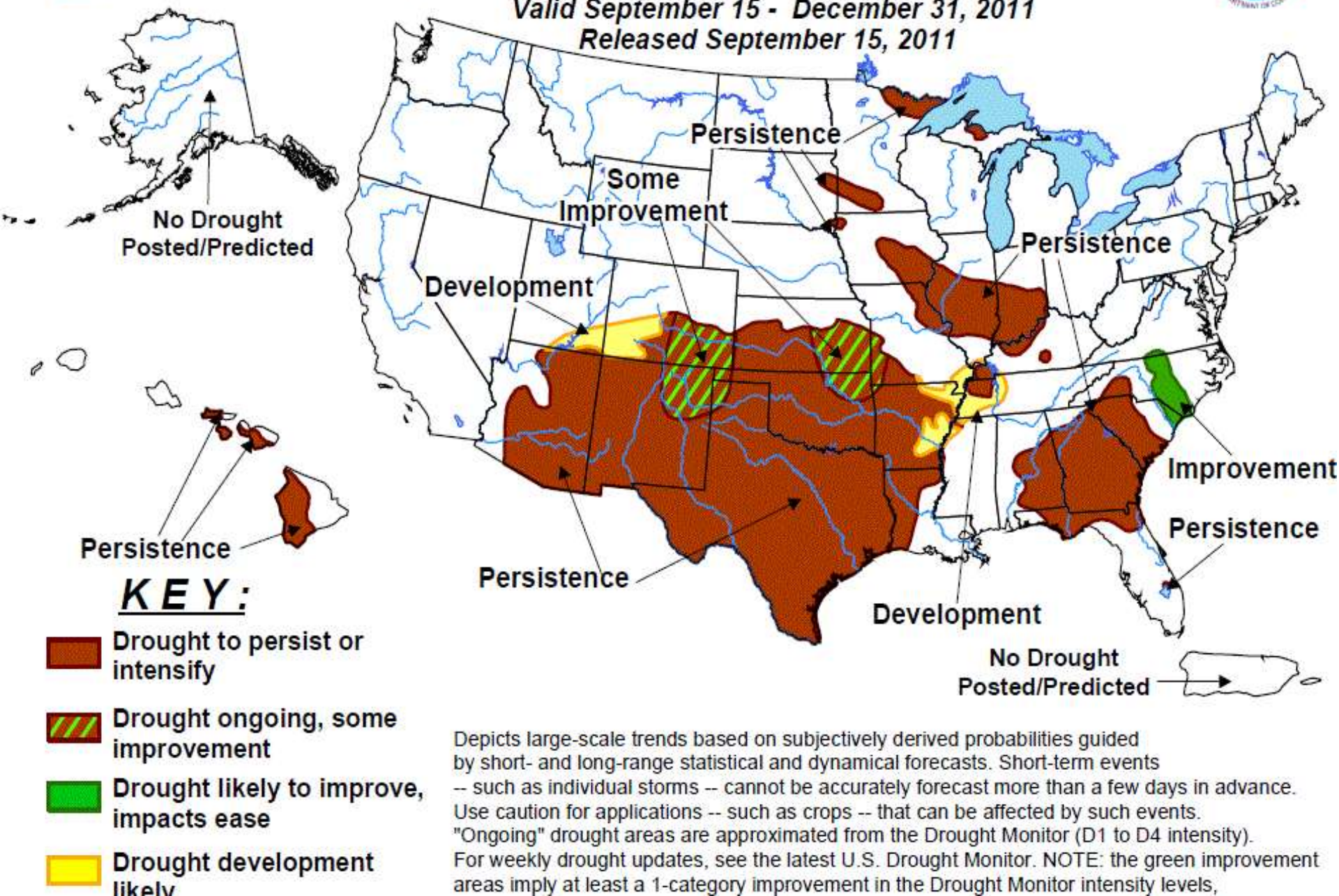


U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid September 15 - December 31, 2011

Released September 15, 2011



Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance. Use caution for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity). For weekly drought updates, see the latest U.S. Drought Monitor. NOTE: the green improvement areas imply at least a 1-category improvement in the Drought Monitor intensity levels,

Feature USDM Product

**Do you know where to go to get the
archived USDM state and/or county
level data and maps?**

<http://droughtmonitor.unl.edu/archive.html>

Drought Monitor Archives

Maps

Tables

Animations

1999 Archive

GIS Data

Contiguous U.S.

Drought Severity

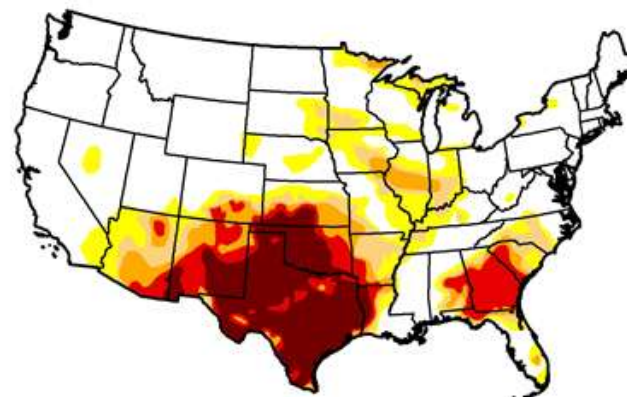
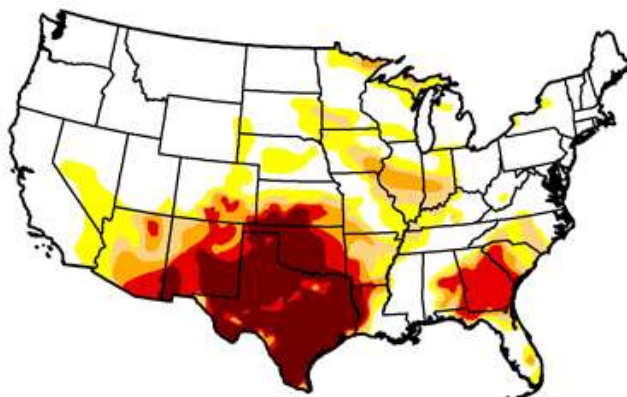
D0 - Abnormally Dry

D1 Drought - Moderate

D2 Drought - Severe

D3 Drought - Extreme

D4 Drought - Exceptional



September 13, 2011



September 20, 2011

Week	Nothing	D0-D4	D1-D4	D2-D4	D3-D4	D4
September 13, 2011	55.36	44.64	30.86	24.10	18.54	11.75
September 20, 2011	57.22	42.78	30.46	23.64	17.99	11.34

Drought Monitor Archives

Maps

Tables

Animations

1999 Archive

GIS Data

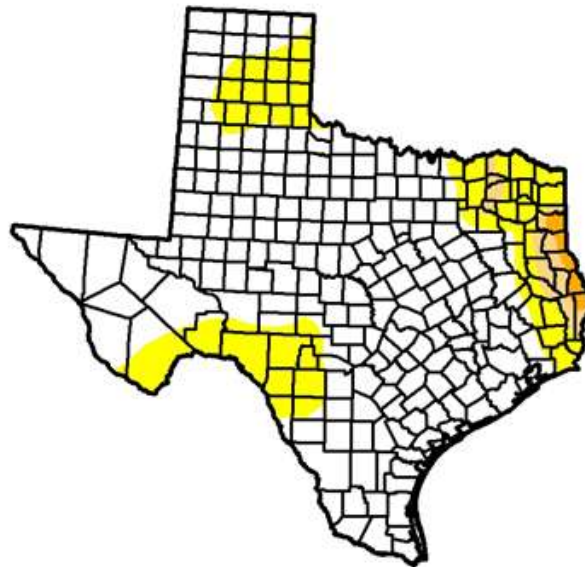
Texas

Drought Severity

D0 - Abnormally Dry
D1 Drought - Moderate

D2 Drought - Severe
D3 Drought - Extreme

D4 Drought - Exceptional



September 21, 2010



September 20, 2011



Week	Nothing	D0-D4	D1-D4	D2-D4	D3-D4	D4
September 21, 2010	77.29	22.71	3.34	0.97	0.00	0.00
September 20, 2011	0.00	100.00	100.00	99.03	96.10	85.43

Drought Monitor Data Downloads

[Maps](#)
[Tables](#)
[Animations](#)
[1999 Archive](#)
[GIS Data](#)

For more information regarding the Drought Monitor datasets, please contact Brian Fuchs at the NDMC via [e-mail](#).

For those individuals interested in obtaining DM data for a period of time longer than a few weeks, please [e-mail](#) your request to Brian Fuchs. Include the date range, for example 2005-2009, and the state or county names. We will make every effort to respond to your request as soon as possible.

NOTE: The weekly KML datasets are now available as KMZ files. We apologize for any inconvenience.

Download the most current Drought Monitor combined shapefiles: [Current Drought Monitor Shapefiles](#)

View the most current Drought Monitor in Google Earth: [Current Drought Monitor](#)

View the most current Drought Monitor WMS service: [Current Drought Monitor WMS](#)

For more information regarding the file formats, click on the appropriate format: [Drought Monitor shapefiles](#), [KML files](#), [GML files](#), [OGC WMS files](#), [Excel files](#).

For more information regarding the Drought Monitor color scheme, please visit: [DM Colors](#)

Please cite the Drought Monitor by including the National Drought Mitigation Center (NDMC), the U.S. Department of Agriculture (USDA) and the National Oceanic and Atmospheric Administration (NOAA).

2011

2010

2009

2008

2007

2006

2005

2004

2003

2002

2001

2000

Download all Drought Monitor shapefiles for [2011](#).

Date	KMZ	Shapefiles		GML	WMS	Statistics		
2011-09-20	KMZ	SHP	Impacts	GML	WMS	U.S.	State	County
2011-09-13	KMZ	SHP	Impacts	GML	WMS	U.S.	State	County
2011-09-06	KMZ	SHP	Impacts	GML	WMS	U.S.	State	County
2011-08-30	KMZ	SHP	Impacts	GML	WMS	U.S.	State	County
2011-08-23	KMZ	SHP	Impacts	GML	WMS	U.S.	State	County
2011-08-16	KMZ	SHP	Impacts	GML	WMS	U.S.	State	County
2011-08-09	KMZ	SHP	Impacts	GML	WMS	U.S.	State	County
2011-08-02	KMZ	SHP	Impacts	GML	WMS	U.S.	State	County
2011-07-26	KMZ	SHP	Impacts	GML	WMS	U.S.	State	County
2011-07-19	KMZ	SHP	Impacts	GML	WMS	U.S.	State	County
2011-07-12	KMZ	SHP	Impacts	GML	WMS	U.S.	State	County
2011-07-05	KMZ	SHP	Impacts	GML	WMS	U.S.	State	County
2011-06-28	KMZ	SHP	Impacts	GML	WMS	U.S.	State	County
2011-06-21	KMZ	SHP	Impacts	GML	WMS	U.S.	State	County
2011-06-14	KMZ	SHP	Impacts	GML	WMS	U.S.	State	County
2011-06-07	KMZ	SHP	Impacts	GML	WMS	U.S.	State	County

Texas Drought Update

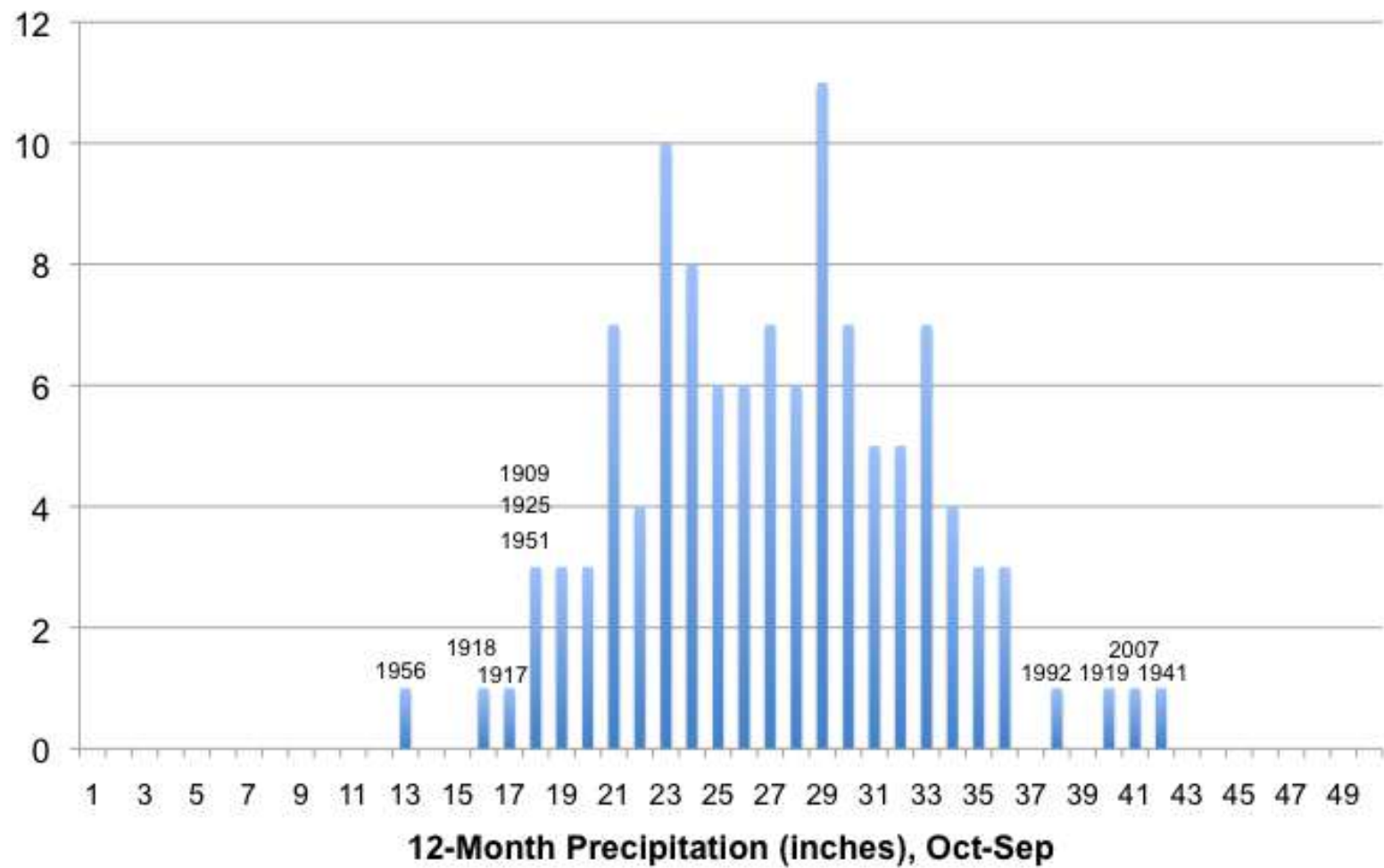
September 29, 2011

John Nielsen-Gammon

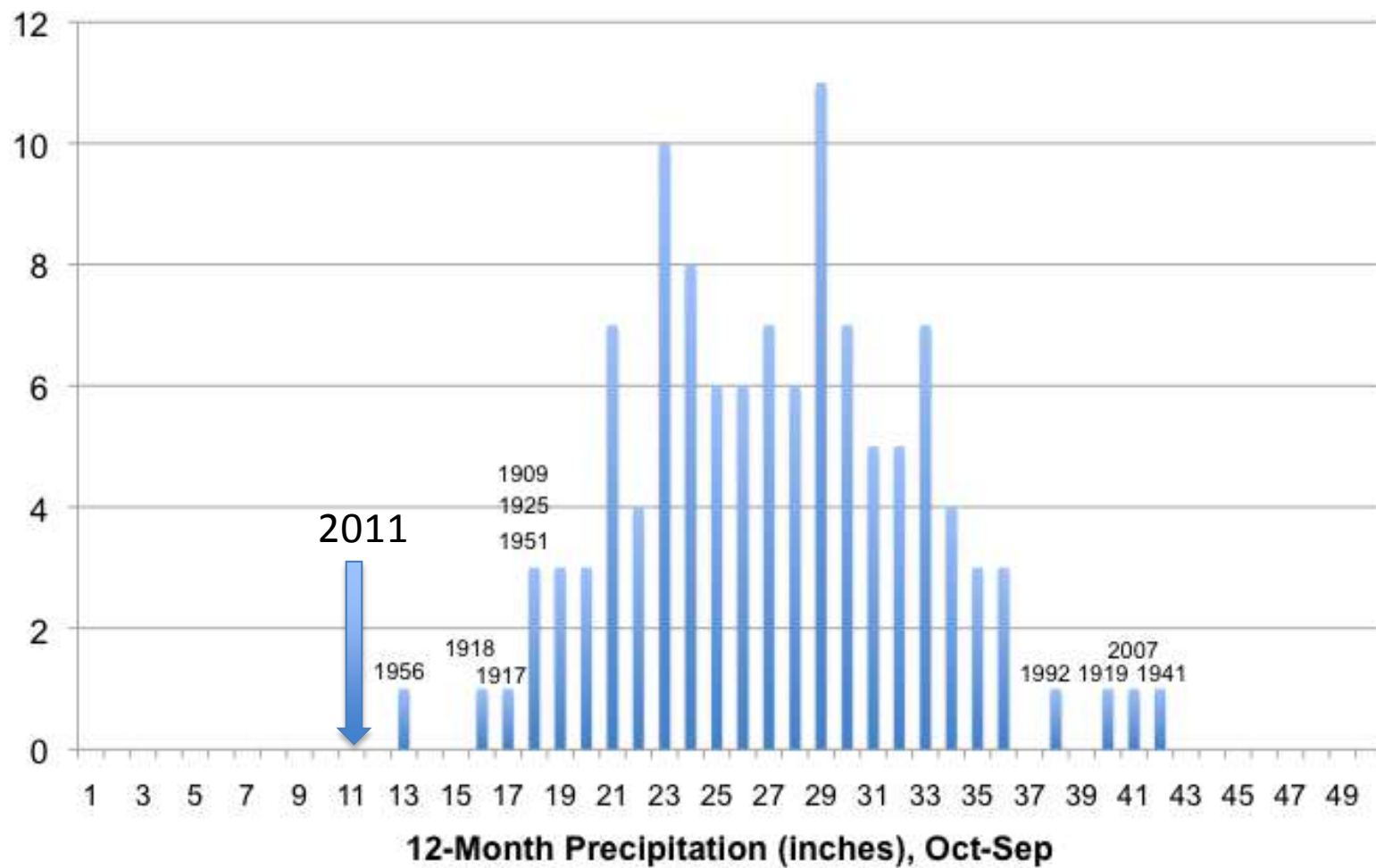
State Climatologist

Office of the State Climatologist

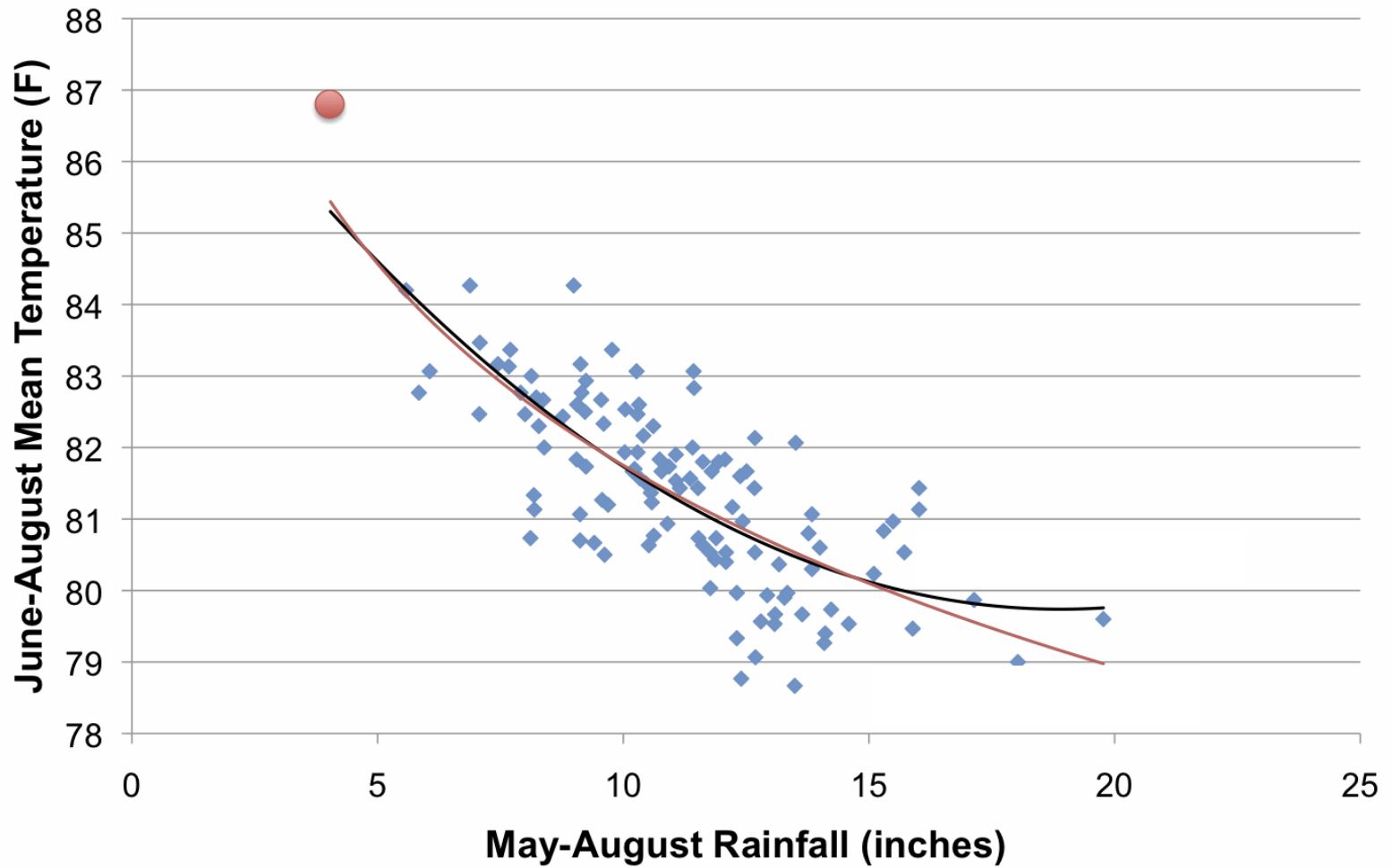
Texas Statewide Precipitation, 1895-2010



Texas Statewide Precipitation, 1895-2010

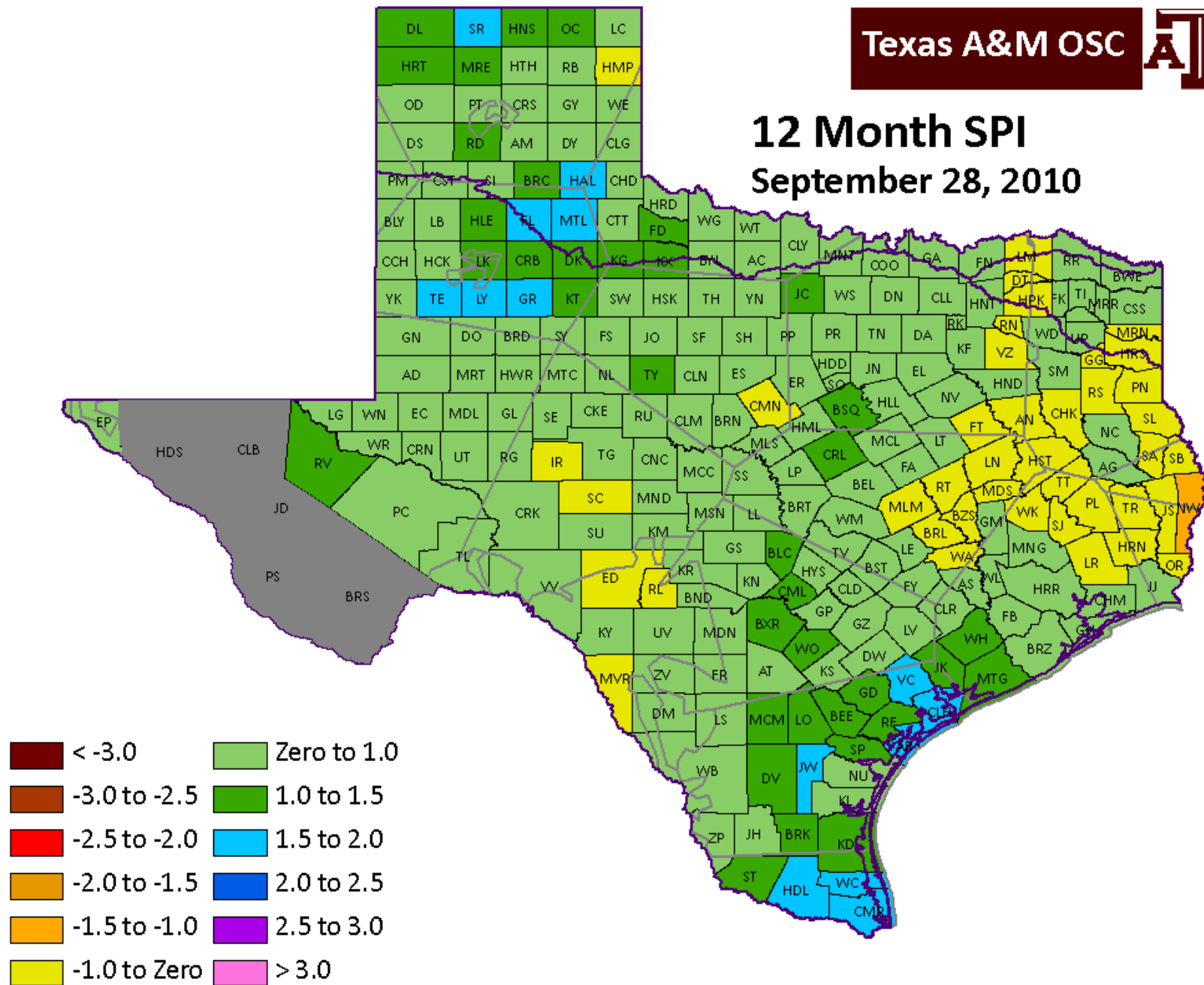


Texas Summertime Rainfall and Temperatures, 1895-2011

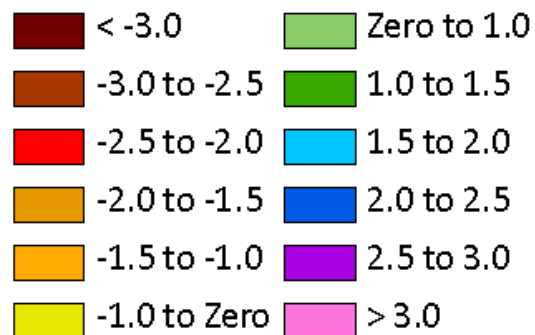
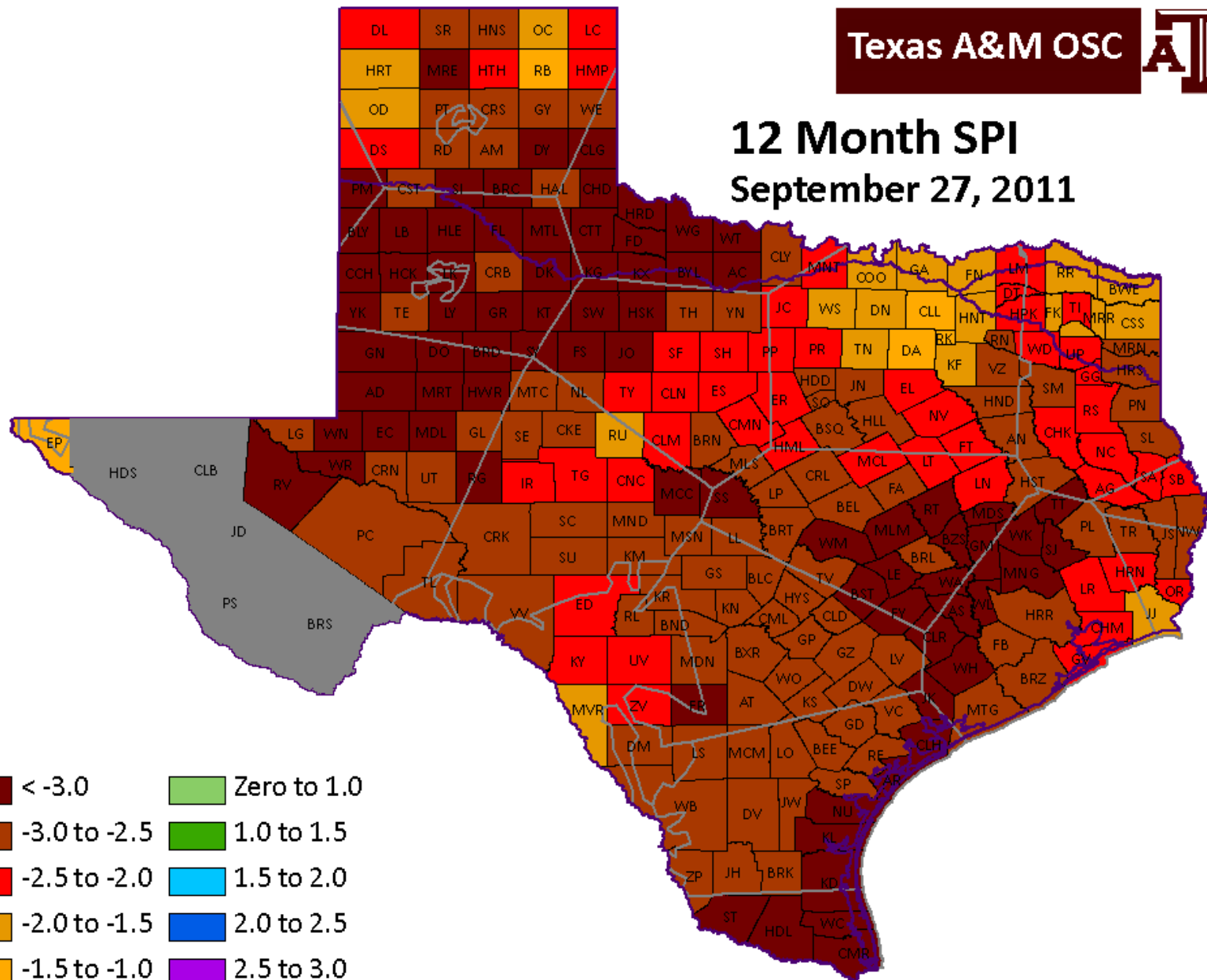


12 Month SPI

September 28, 2010



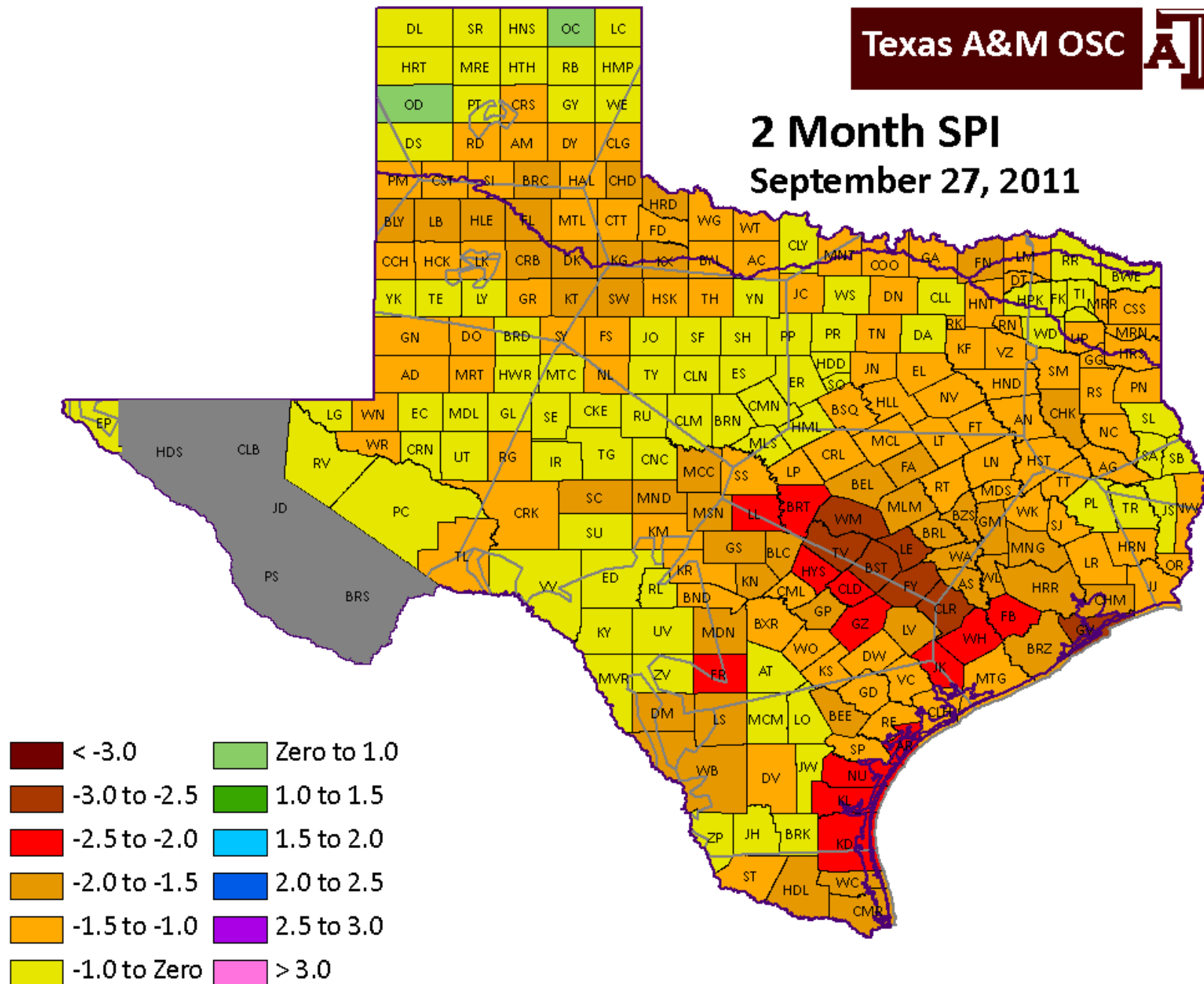
12 Month SPI September 27, 2011



Impacts

- Farming
- Ranching
- Water Supplies
- Wildfire

2 Month SPI September 27, 2011



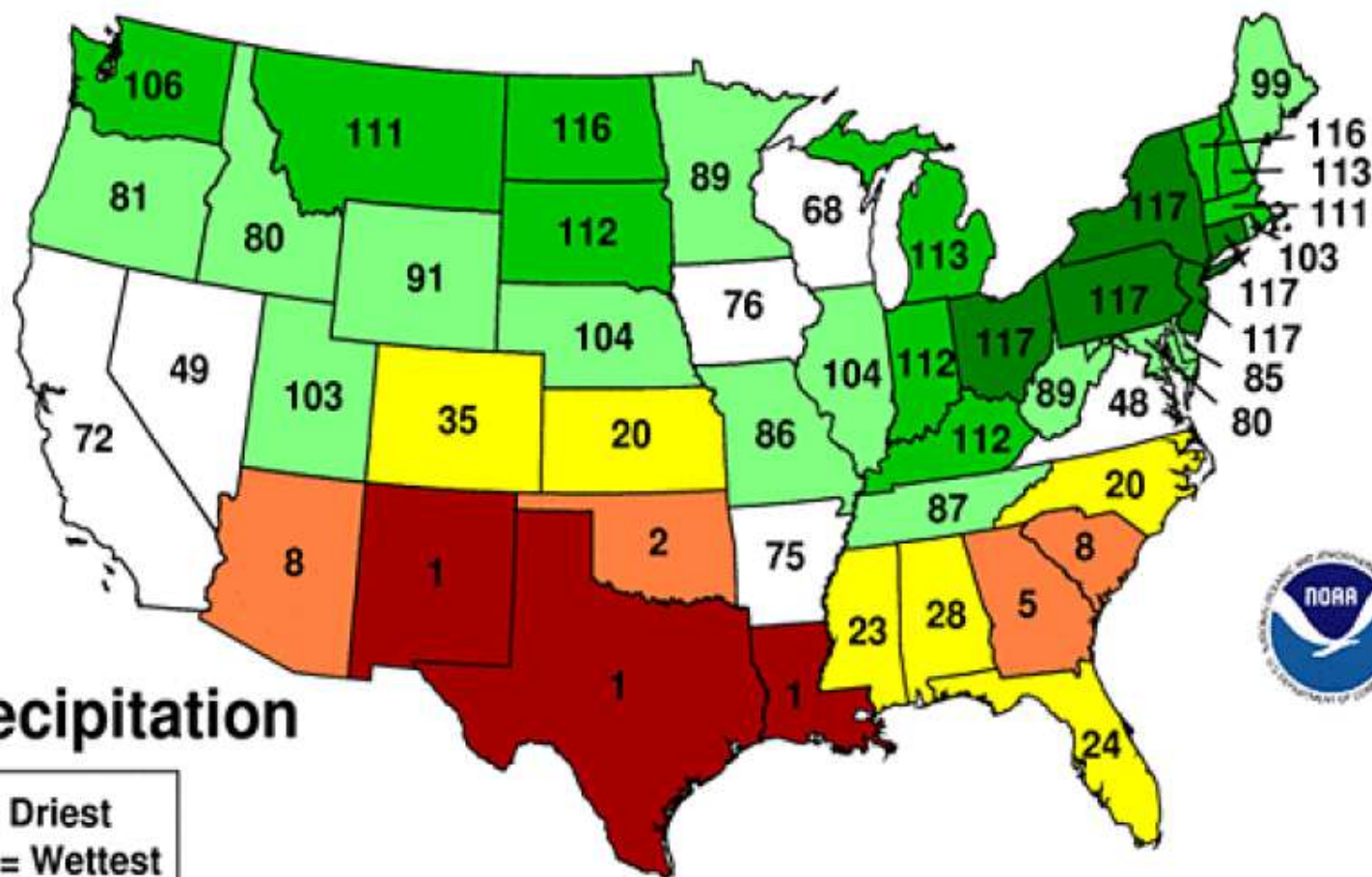
New Mexico Drought Update

September 29, 2011

David DuBois
State Climatologist
New Mexico Climate Center

January-August 2011 Statewide Ranks

National Climatic Data Center/NESDIS/NOAA



Precipitation

1 = Driest
117 = Wettest



Record
Driest



Much
Below
Normal



Below
Normal



Near
Normal



Above
Normal



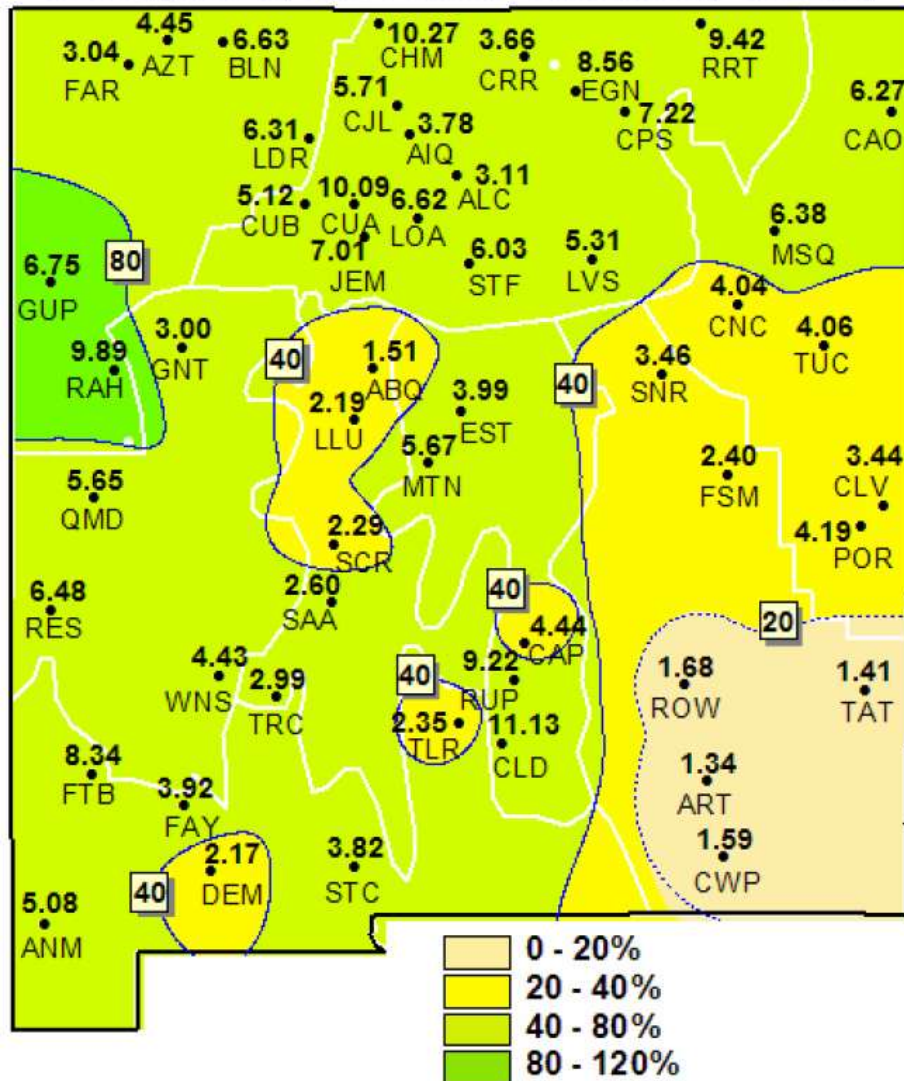
Much
Above
Normal



Record
Wettest

2011 (Jan –Aug) Precipitation

January - August 2011 Precipitation
Totals (plotted) and Percent of Normal (contours)



Statewide Average:
52% of normal

Northwest Plateau:
78% of normal

Northern Mountains:
58% of normal

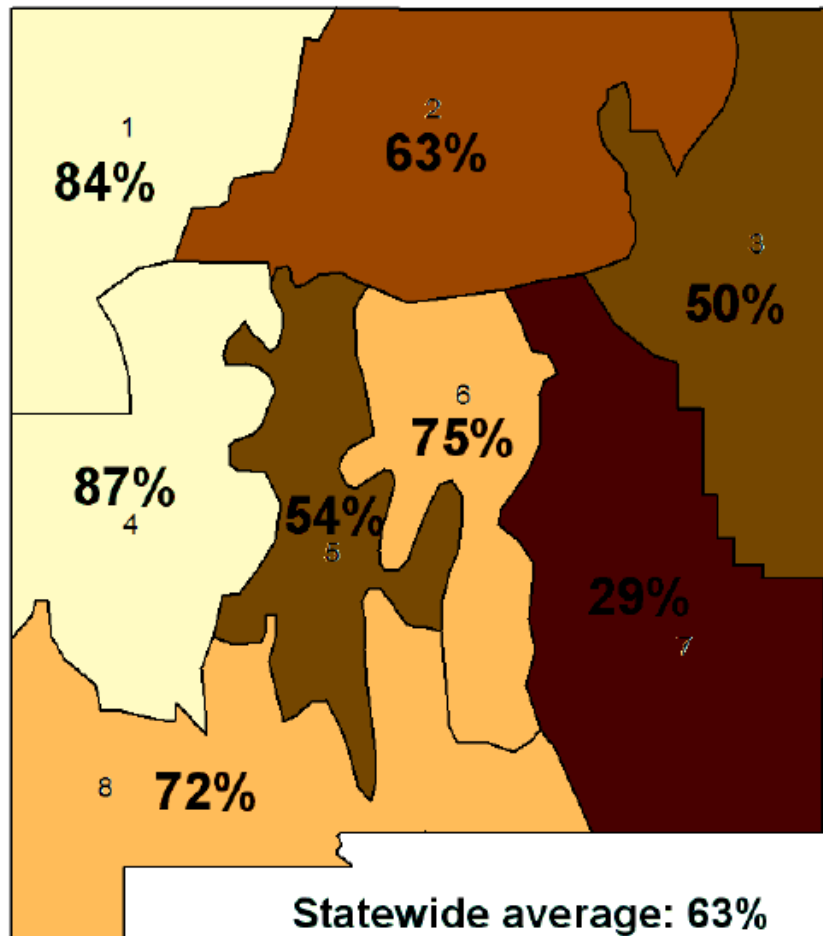
Central Valley:
37% of normal

Southern Desert:
52% of normal

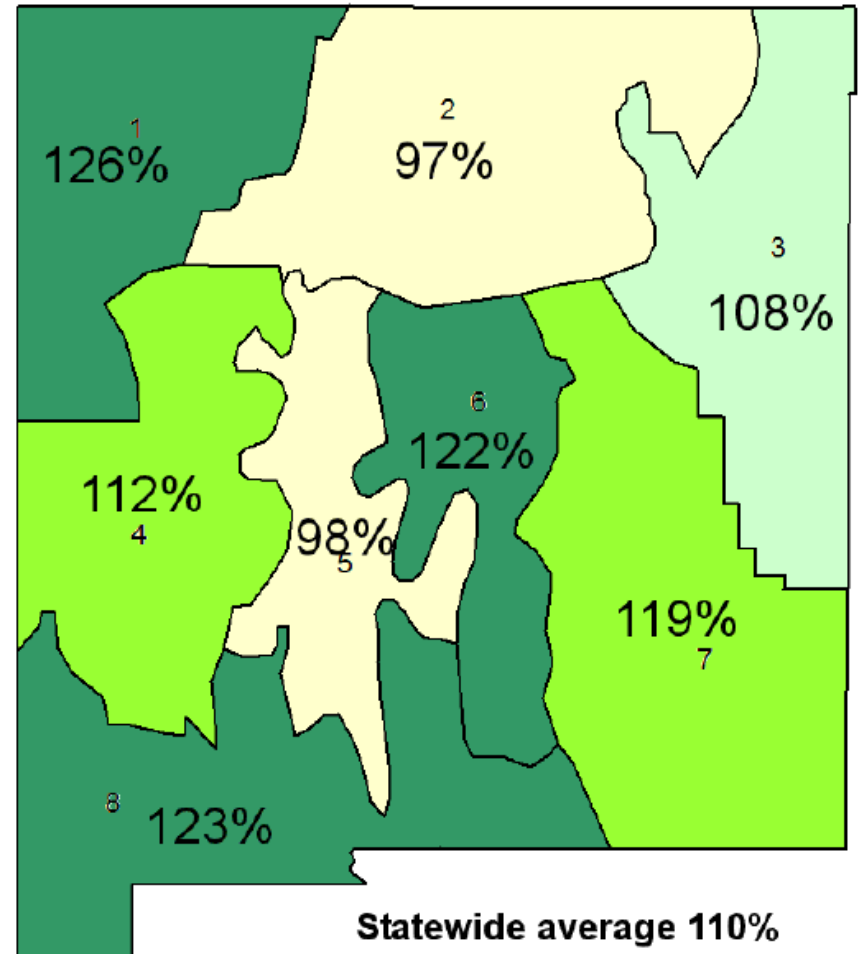
Southeastern Plains:
21% of normal

This summer compared to last

Summer 2011 Precipitation - June through August - (percent of normal)



Summer 2010 Precipitation - June through August - (percent of normal)



Year to Date Wildfires



As of Sept. 22
about 1,050,153
acres have been
burned from
wildfires this year

Last year 120,055 acres burned due to wildfires

Largest on record
since 1990

Map: <http://gacc.nifc.gov/swcc/predictive/intelligence/intelligence.htm>

Statistics: http://gacc.nifc.gov/swcc/predictive/intelligence/ytd_historical/historical/historical.htm

Oklahoma Drought Update

September 29, 2011

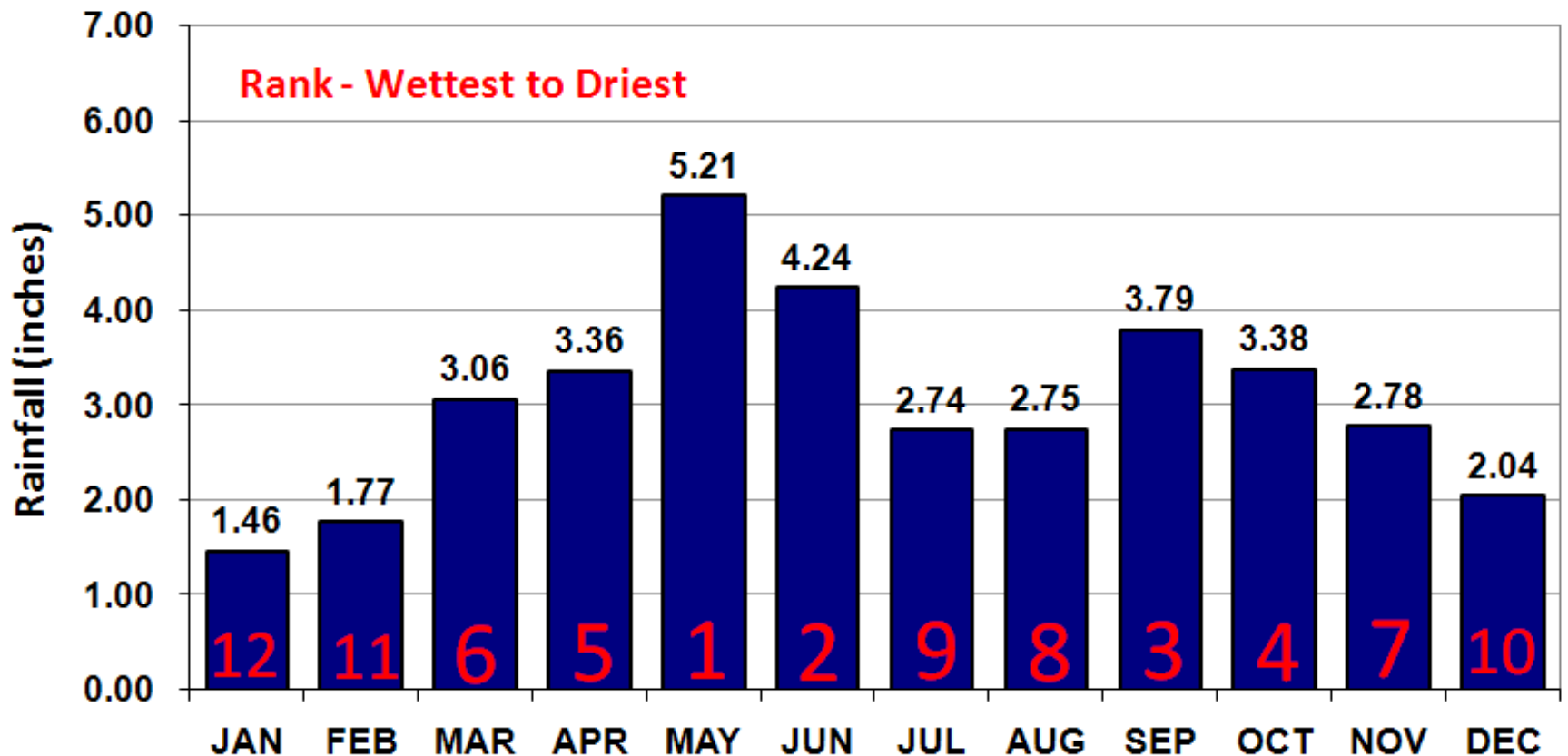
Gary McManus

Associate State Climatologist

Oklahoma Climatological Survey

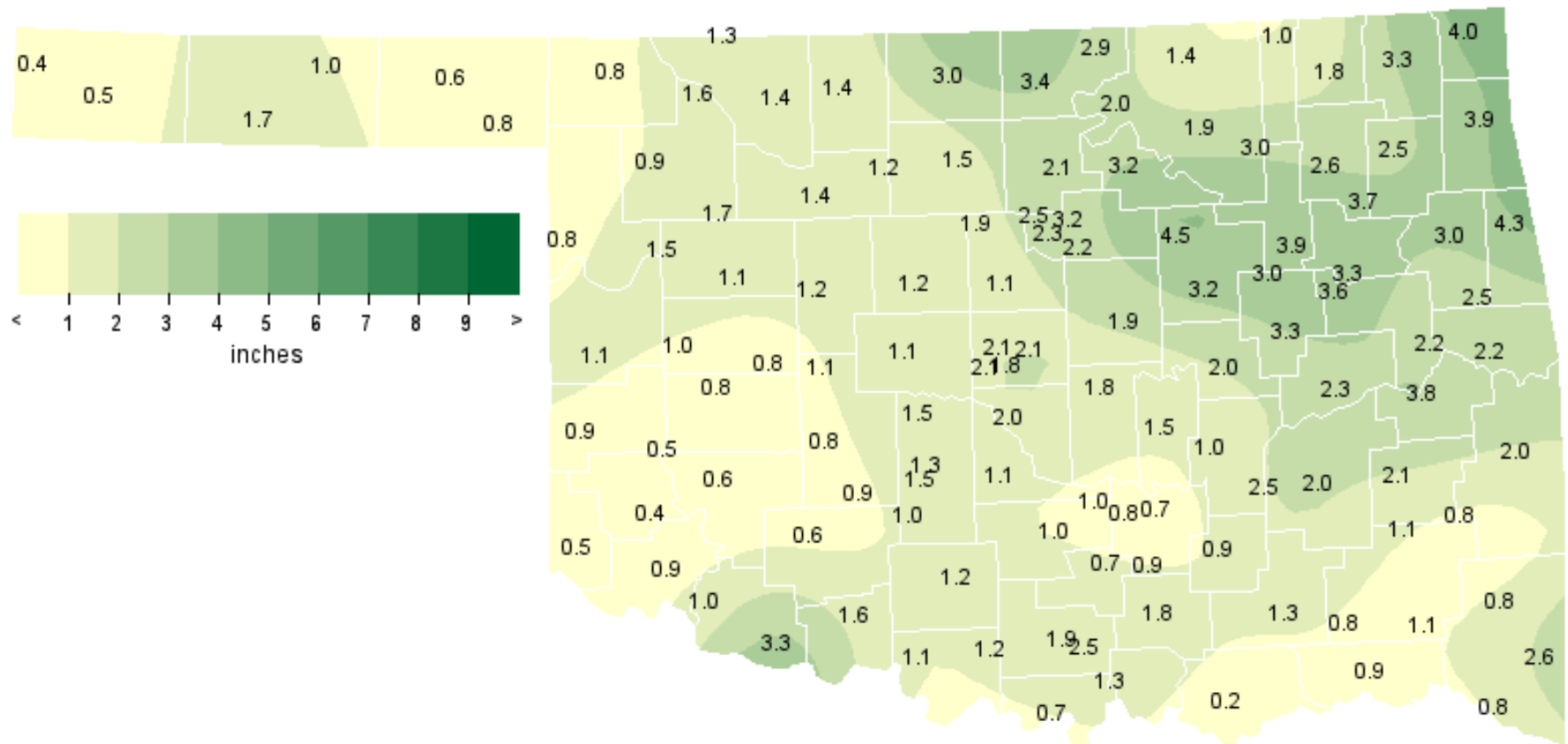
“Normal” precipitation not enough

Oklahoma Normal Monthly Precipitation



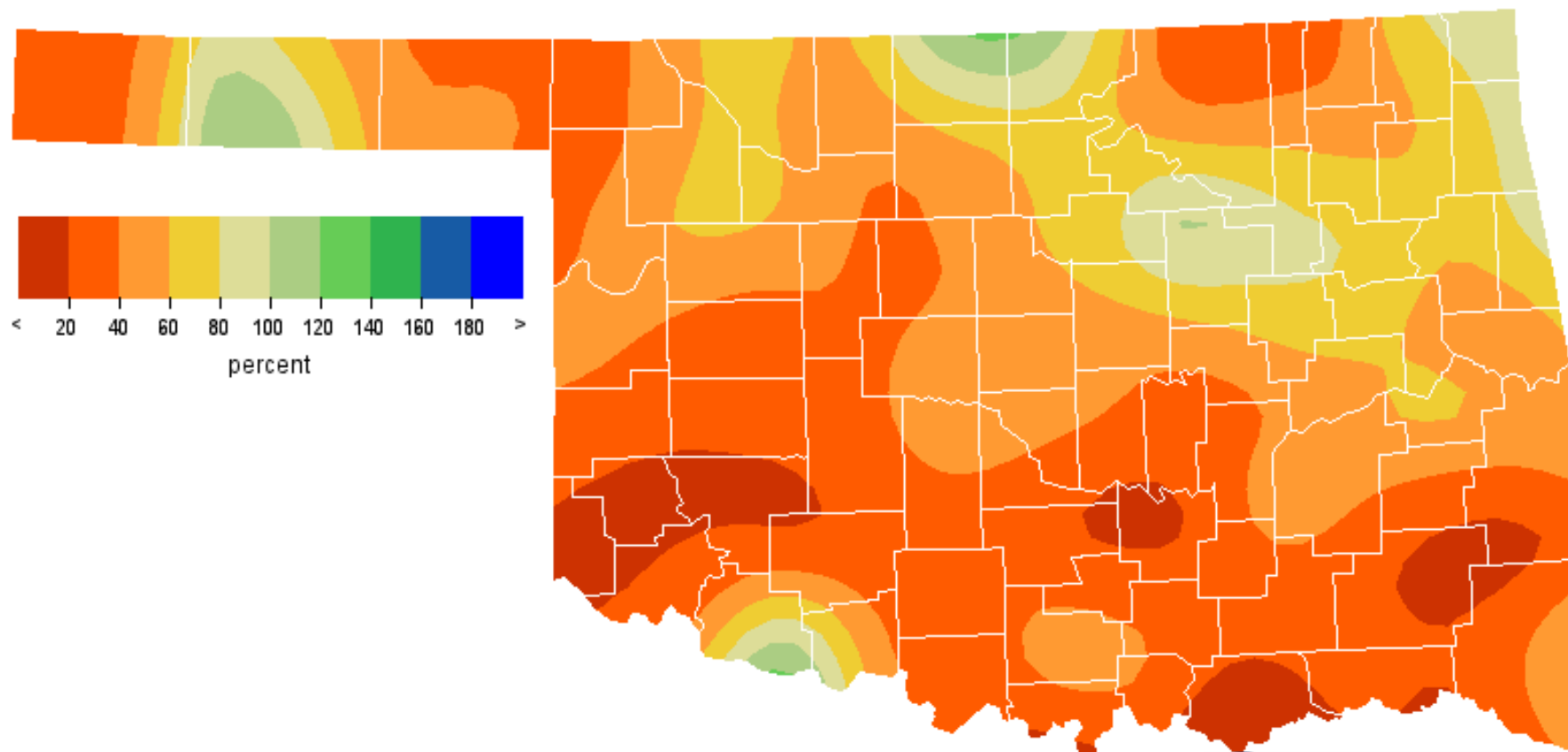
September has been a dud!

Rainfall totals



Observed Rainfall

September percent of normal



Percentage of Normal Rainfall

Copyright (c)2011 Oklahoma Climatological Survey. All rights reserved.

Rainfall data collected by Oklahoma Mesonet.

U.S. Drought Monitor

September 27, 2011

Valid 7 a.m. EST

Oklahoma

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	100.00	100.00	78.97	66.42
Last Week (09/20/2011 map)	0.00	100.00	100.00	100.00	90.00	66.42
3 Months Ago (06/28/2011 map)	0.13	99.87	75.59	55.96	41.22	32.55
Start of Calendar Year (12/28/2010 map)	13.82	86.18	47.90	1.50	0.00	0.00
Start of Water Year (09/28/2010 map)	66.28	33.72	4.21	0.00	0.00	0.00
One Year Ago (09/21/2010 map)	58.82	41.18	4.21	0.00	0.00	0.00



Intensity:



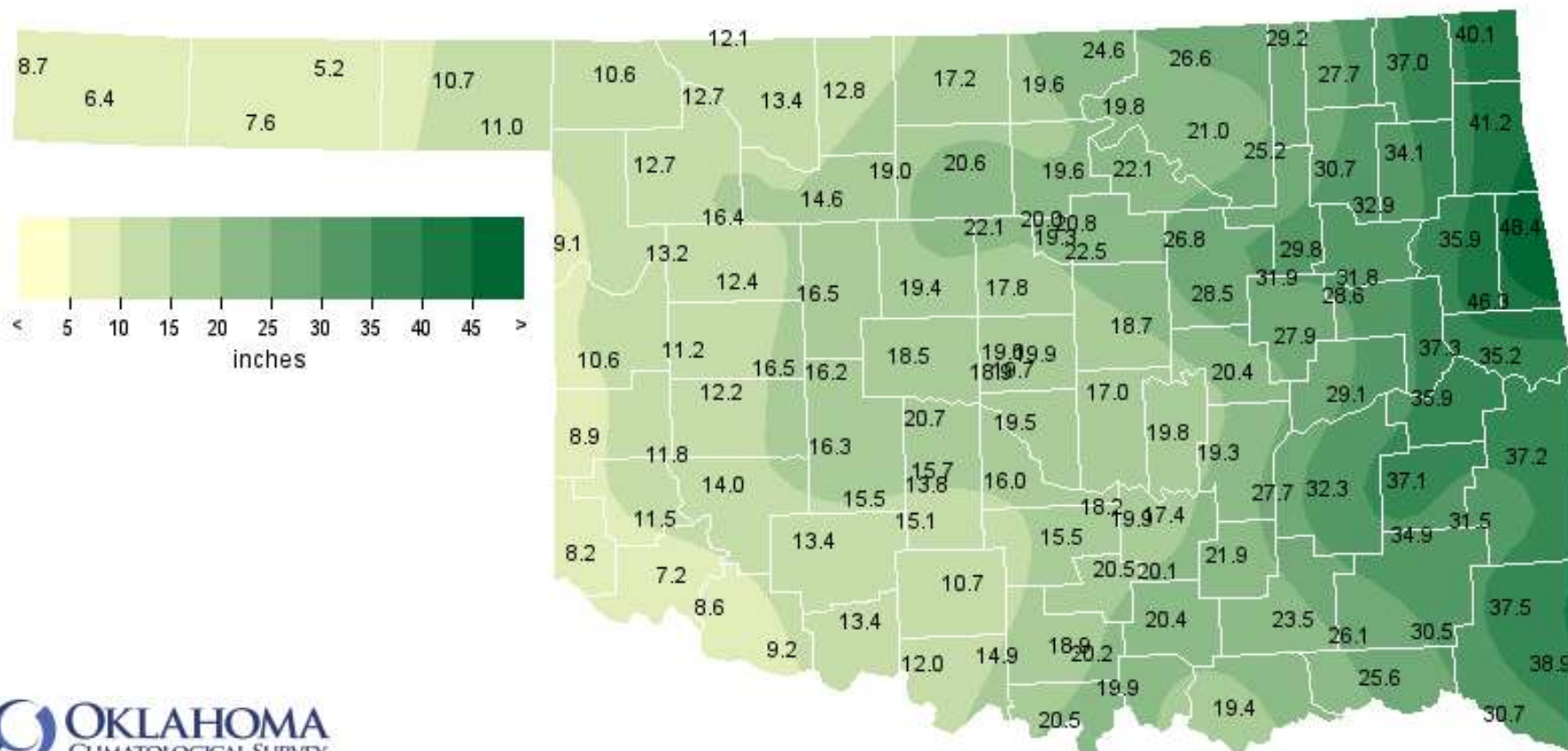
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<http://drought.unl.edu/dm>



Released Thursday, September 29, 2011
Michael Brewer, National Climatic Data Center, NOAA

Water year totals: Oct 1, 2010-Sep 30, 2011



OKLAHOMA
CLIMATOLOGICAL SURVEY

Observed Rainfall
Water Year

Resources

- U.S. Drought Portal
 - <http://www.drought.gov>
- Past webinars, summaries, and Federal/State Assistance
 - http://www.drought.gov/portal/server.pt/community/south_central
- Drought Impact Reporter
 - <http://droughtreporter.unl.edu/>
- State Climatologists
 - <http://www.stateclimate.org/>
- National Drought Mitigation Center
 - <http://drought.unl.edu/>
- Southern Climate Impacts Planning Program (SCIPP)
 - <http://www.southernclimate.org/>
- Climate Assessment for the Southwest (CLIMAS)
 - <http://www.climas.arizona.edu/>

Does the Drought Monitor look not quite right? Tell us!

- Drought Impact Reporter
- Contact your State Climatologist
- E-mail the DM Authors:
droughtmonitor@unl.edu